3

Chapter 3

STATUS OF OPEN SPACE

Going, Going, Gone?

3.1 A History of Open Spaces in Burlington

Burlington has always identified with and valued the natural character of the city. Open spaces are integral to the image and identity that Burlington treasures. Among the City's best recognized and most important open spaces include:

The Intervale

Some of the richest agricultural soil in the area lies within the Winooski River flood plain known as the Intervale. As a result, this area has an agricultural tradition that stretches back to its first human settlers. These first farmers were Native Americans who grew beans, corn and squash in the area for hundreds of years. American settlers, including Ethan Allen, later farmed the floodplain throughout the 18th and 19th centuries. The farms in the Intervale, however, have declined in this century, and it became a dumping ground in the 1960's and '70's. Dumps, highway construction and wetland drainage threatened the integrity of the Intervale and obscured its agricultural value.

Nevertheless, farming never completely ceased in the Intervale. Even as the last dairy farms were waning, Burlington residents lobbied to open the area to residents who wanted to grow their own food. To fulfill this demand, Tommy Thompson of "Gardens for All" set up community gardens in 1970.

"The Intervale is a 700 acre flood plain along the Winooski River just one mile from downtown Burlington. The area represents the last prime farm land in the city boundaries. In recent years the Intervale was home to over 200 rusted out cars and mounds of old tires. Today, however, this land has been revitalized and is home to eight small incubator farms, 2 membership farms serving 520 families, a community co-op farm that in 1999 produced 600,000 pounds of vegetables for the City of Burlington, and a large-scale composting project."[4]

In 1986, the Intervale entered its current era when Will Raap, president of Gardener's Supply Company, decided to locate the headquarters of his national mail order company on the far end of the flood plain. Mr. Raap's vision of a sustainable farming experiment was solidified in 1988 when he formed the Intervale Foundation, a non-profit organization. The Foundation took over the task of acquiring additional acreage in the flood plain, administering an incubator program, managing the Green City Farm and operating the compost project. The Foundation is committed to growing food using sustainable agriculture methods such as crop rotation, composting, and non-chemical pest control.[4]

Once targeted for a large industrial park (1960s), today the Intervale is the largest remaining open space left in the city. In addition to serving as the agricultural heart of Burlington, the Intervale is premier wildlife habitat with frequent sightings of deer, fox and mink. The Intervale also functions as an important recreational area for hikers, bikers, boaters, and others.

Agriculture and recreation on the Intervale.

The Urban Reserve

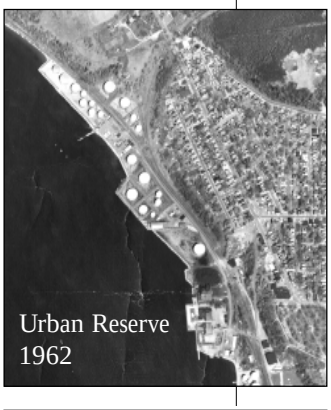
The history of the lakefront property known as the "Urban Reserve" began with the onset of industrialization. Like so much urban waterfront, the area was created out of fill excavated from the shoreline and backfilled behind wooden cribbing. As the post Civil War timber industry boomed, the land was created between 1870 and 1872 to serve as a timber processing area for the nation's most important lumber port, and later as a corridor for the growing railroad.

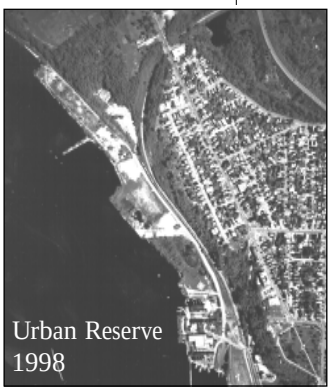
As the timber industry moved west, the petroleum industry moved into the area. Conveniently served by water and rail, the abandoned lumber yards became a regional oil storage facility. Since World War I, the shoreline fill has housed 19 above-ground oil tanks. As the industry

Burlington has set aside a 45 acre portion of waterfront land as the Urban Reserve. The City has cleaned up this degraded industrial area within an overall plan to focus development energies in the downtown core and to leave a significant portion of the "rediscovered" waterfront as a landbank for future generations.[4]

A Success Story in the Making: The Urban Reserve

An industrial site until the 1960s, the Urban Reserve has seen great improvements since its abandonment and later purchase by the City. Notice the significant increase in vegetation in the past 36 years.


Urban Reserve 1962


Urban Reserve 1998

changed its storage methods, the tanks were phased out and abandoned in the late 1960s. They sat dormant until their removal, beginning in the 1980s and the area has remained largely vacant.

In the late 1980s, Burlington's long-term waterfront plan began to take shape. The City hoped to acquire this abandoned oil tank storage site with an eye towards obtaining more access and control of the city's lakeshore. In 1991, this plan came into fruition when the City purchased the 40 acres of land from the Central Vermont Railroad. The land was designated an "Urban Reserve" under the following mission:

- To preserve a large natural area from unwanted development
- To reserve the right for future generations to determine what level of development should occur at this site
- To concentrate the efforts of Burlington's development activities within the downtown business district and waterfront commercial district

In coming years Burlington residents will have the challenge and opportunity to participate in planning for the future of the Urban Reserve. For now, the property is held in trust by the City for its future citizens.[4]

The Barge Canal

The Barge Canal, also located on the shore of Lake Champlain, was the site of a coal gasification facility from the early 1900s until 1966. The canal was created to provide access for coal barges to feed the facility. By-products from the operations-particularly coal tar-were dispersed on the site, resulting in ground water, surface water, soil, and sediment contamination that remains today.

In 1983, the EPA placed the site on a National Priority List under the guidelines of the Superfund program. The EPA proposed a $50 million cleanup plan that was to commence in 1992. This plan was however rejected by the City based on the exorbitant cost, and very limited and dubious scientific evidence. Outside investigators concluded that the EPA "cleanup" would produce air quality and health hazards more serious than the threat posed by the site if left alone. These findings spurred a groundswell of opposition from local citizens, the City and State governments, and numerous environmental organizations.

Citizen activism achieved a clear victory in 1993 when the EPA abandoned its cleanup plan, and agreed to work with the City to develop a new plan. The result was the creation of the "Pine Street Barge Canal Coordinating Committee", a first-in-the-nation effort to let residents find a cleanup plan they could support. This group, created with the collaboration of City officials and the EPA, was charged with the responsibility of developing a plan for managing the site that meet local concerns and maintained compliance with the federal law that put the canal onto the Superfund list in the first place. A new plan for the site was approved in 1999.

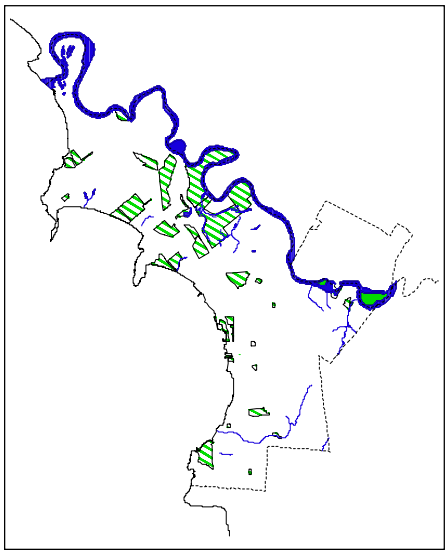
City Parks

Public parks provide a number of functions, and serve a variety of populations. District parks protect natural areas as well as provide recreational opportunities such as hiking and biking on trails. Neighborhood parks typically offer playground equipment to serve small areas of the City, and quick access to green spaces and the outdoors to City residents. Small urban open spaces such as City Hall Park have been at the core of Burlington's sense of place and civic culture. In many ways, the very identity of any city is shaped by the character of its public spaces.

Burlington currently contains approximately 980 acres of public park land. This figure includes both parks that are managed for public use and those that remain undeveloped for passive recreation and / or conservation purposes.[10] The majority of this land is owned and managed by City's Dept. of Parks and Recreation and the Winooski Valley Park District.

The Department of Parks & Recreation currently owns and manages 530 acres of recreation and conservation land in Burlington. The system under their management includes City Parks, Neighborhood Parks, Playfields, Special Use Areas and District Parks.

A postcard depicts City Hall Park in the 1800s.



Burlington Public Parks, 1999 (City & WVPD)

Many of Burlington's public parks have rich and varied histories:

•**Battery Park**, an impoundment area during the War of 1812, now houses a band shell, fountains, promenade, and playground. Burlington residents have always enjoyed viewing the lake and Adirondacks from Battery Park

•**Ethan Allen Park**, one of the City's largest parks, has a history that dates back to the Native American era, when it was used by the Abenaki as a camp and forage site. The tower on the site was dedicated in 1905 as a monument to American Revolution hero Ethan Allen.[25, 26]

•The City purchased **North Beach** from the Arthur farm in 1918.[26] Locally known as the best sandy beach in Chittenden County, North Beach has been a popular summer spot in Burlington for many years.

A girl enjoys North Beach in the mid-1920s.

Since its inception in 1972, the Winooski Valley Park District has spent over $2.5 million on land acquisitions and improvements throughout the eight member communities. To a large extent, these have been "defensive expenditures" in order to preserve open space in response to development pressures. The Park District acquired 1,722 acres of land between 1972 and 1996, including 12.25 miles of river shoreline. 450 acres of the WVPD land is located in Burlington, including portions of the Intervale and the historic Ethan Allen Homestead.[10]

3.2 Burlington's Current State

Open Space Trends

According to the Vermont state Department of Environmental Conservation, 466 acres of Vermont's wetlands were destroyed or impaired between 1990 and 1997.[2]

Appletree Point
1962

Appletree Point
1998

The American Farmland Trust estimates that 4.2 million acres of prime or unique farmland were converted to urban uses between 1982 and 1992—a loss of nearly 50 acres every hour. [1]

Going, going, gone?

Burlington's open space is disappearing at an alarming rate. Between 1960 and 1980, 800 acres of open space was consumed by development representing approximately 12% of the city's estimated total land area of 6,500 acres. Between 1980 and 1989, Burlington's lost another 16% of its open spaces, reducing the total open space to approximately 22% of the city's area.

In the 1990s, the erosion of open space has continued unabated, reaching a critical stage and threatening the city's quality of life. While large commercial and residential development in the downtown and on the waterfront receives a lot of attention, smaller developments are slowing consuming remaining open space, and encroaching upon important natural and recreational systems highly valued by the community. Neighborhood opposition to new development is on the increase.

The Region

In developing an Open Space Plan for Burlington, consideration of regional open space connections is of paramount importance. The City and all of its systems, whether natural or recreational, are closely connected to the surrounding region. Imagine a bicycle path that ends abruptly at the city boundary or a watershed protection program that does not extend into the neighboring town. Clearly, Burlington will benefit from partnerships with neighboring communities and the region when considering open space conservation policies. Already, agencies such as the Chittenden County Regional Planning Commission and the Winooski Valley Park District both work on a larger scale to include regional considerations in open space planning.

Just as in Burlington, open space is dwindling in the surrounding communities. Similar pressures, in the form of sprawl-type development, are impacting all types of open space, from agricultural land to forested areas and wetlands. Residential and commercial sprawl and its accompanying infrastructure run through the landscape like a web, disconnecting open spaces from each other and disrupting natural processes.

For example, Chittenden County has experienced more wetland destruction in recent years than any other area of the state. As the population of the suburban communities surrounding Burlington continues to increase in coming years, pressures to develop the remaining wetlands will rise.[2]

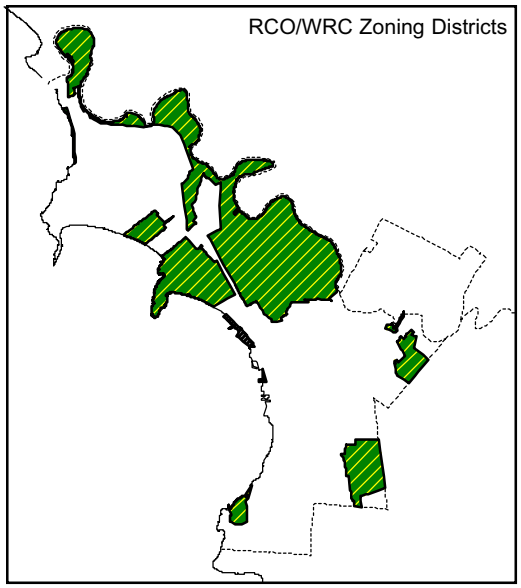
Agricultural lands have experienced a similar decline as farmers have found subdividing and selling their farmland more profitable than farming. According to the Census of Agriculture, the number of farms in the County declined steadily between 1950 and 1992 from 1,330 to 405 farms. By 1992, farmland had dropped from 72.6% of the County's land base in 1950 to just 24.0%.[6]

How is open space protected?

Past conservation efforts of the city have largely been targeted to specific areas such as the waterfront, or driven by individual development applications. Regulation has been the primary protection mechanism over the past several years.

Zoning is perhaps the most comprehensive means by which the City currently protects open space and natural areas. Burlington's zoning ordinance designates these areas as Recreation, Conservation, Open Space (RCO or WRC Districts). Within this district, generally no new residential or commercial development is permitted unless it is accessory to an agricultural use. While on it's face this appears very restrictive, a variety of public and institutional uses are allowed including libraries, dormitories, laboratories and places of worship are permitted (in some cases conditionally).

The City's subdivision regulation has been the most widely used tool to acquire public open space. Prior to the assessment of Impacts Fees in 1992, a subdivision of over 3



acres required a 15% percent set aside for park and recreational purposes. Several city parks were acquired using this method including:

- Northshore Beach
- South Meadow Park
- Strathmore Park
- Appletree Park
- Crescent Woods Park

While useful in some situations, regulation is not an effective long-term solution to land protection. Regulations are subject to change depending on the political and economic climate. Furthermore, zoning is often too cumbersome and imprecise to protect a specific site for a specific purpose. Regulation requires a strong commitment by City officials and developers alike for compliance and enforcement, without which regulatory changes are ineffective. Finally, regulation of development does not permanently set aside areas of open space, or ensure its availability for public use and enjoyment.

Other Efforts to Protect Open Space

Local agencies have undertaken conservation efforts to preserve open spaces within the city. These conservation efforts fall mainly under the responsibilities of two public entities: the City through the Dept. of Parks & Recreation and the Winooski Valley Park District (WVPD). Recent acquisitions in Burlington have included:

City Acquisitions:
- Burlington Bike Path
- Waterfront Park
- Boathouse
- Expansion at Perkins Pier
- Roundhouse Point
- Urban Reserve

WVPD Acquisitions:
- Salmon Hole
- Derway Island

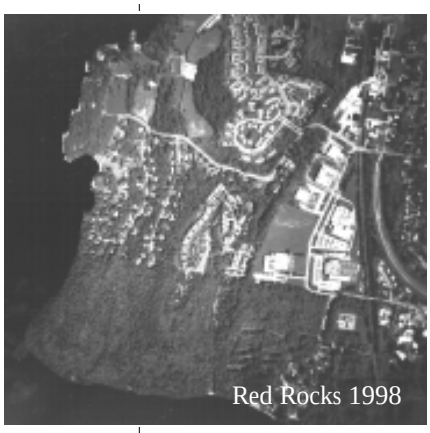
A newly created Winooski Valley Greenscape Coalition has formed in an effort to unify and advocate for stewardship of the lands in the Winooski valley. The Coalition, according to their draft mission statement, will "bring together all the various people and organizations of the Winooski valley who care about this corridor of natural beauty, human history, and fruitful agriculture."[11] Current conservation programs in place in the Winooski valley include the WVPD, the Intervale Foundation, the Ethan Allen Homestead, the Richmond Conservation Commission, and the City of Burlington; the Coalition aims to advocate for interlocking stewardships between these organizations.

Finally, some areas have been conserved through the action of individual property owners and nonprofits. Examples include the sale of development rights on 65 acres of UVM's Centennial Woods Natural Area by the University to the VT Land Trust; the renewal of a 100-year lease for seasonal camps on the former Flynn Estate property;

"Over the years, I have watched my favorite places disappear."

--a Burlington resident


Red Rocks 1962


Red Rocks 1998

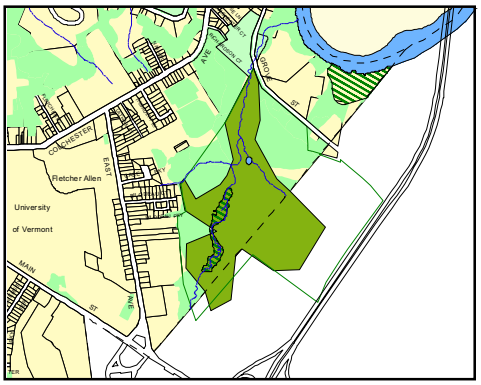
About 18% of Vermont's stream-miles and 22% of our lake and pond acres are estimated to be impaired or polluted, and even more have potential threats to their designated uses.[2]

acquisition of agricultural land in the Intervale by the Intervale Foundation; and the transfer of approximately 9 acres of the Mount Calvary Red Maple Swamp by the Burlington Housing Authority to the City.

Profiles of Open Spaces at Risk

The following series is intended to illustrate examples of open spaces within the City, and some of the challenges they face under the current protection framework in Burlington.

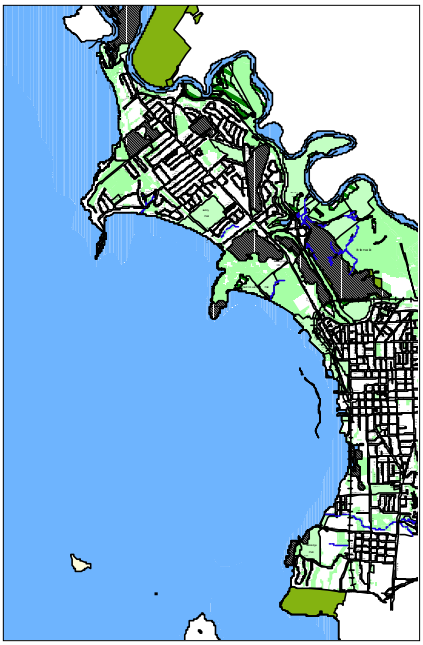
- **Centennial Brook & Woods:** This significant open space is experiencing incremental development on its margins, and is a good example of the impacts and pressures caused by adjacent development. This area is identified as an important natural area by both the City of Burlington and the City of South Burlington, and is zoned for conservation. 67 acres (44 in Burlington) of this site has been permanently protected by UVM and the Vermont Land Trust, yet much more of this sensitive area remains largely unprotected.



Centennial Brook Area

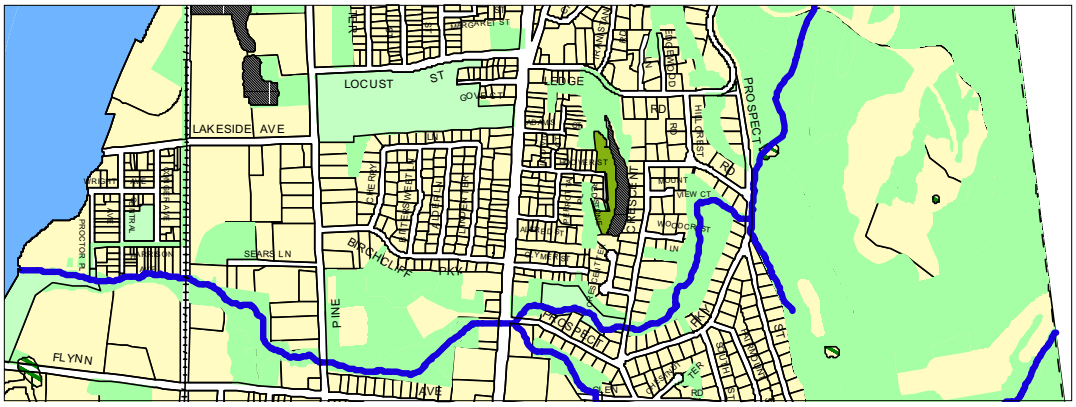
- **Lake Champlain Waterfront:** The waterfront represents an area of very high public interest and competing pressures for development. The waterfront runs the entire length of the City's western boundary, and has varying degrees of protection through zoning. While some areas are publicly

Lake Champlain Shoreline



owned or zoned for Recreation / Conservation / Open Space, most of the shoreline is zoned for commercial use or low-density housing. As the Appletree Bay aerial photos on an earlier page demonstrate, "Waterfront Residential-Low Density" zoning often results in larger lots built on previously undeveloped land, and a loss of public access to the lake.

- **Sisters of Mercy Property:** This large undeveloped lot near the University had been available for public use for many years. High-density development potential, a critical need for more housing in the city and financial needs of the long-time owners resulted in a development proposal for the site. Many neighborhood residents expressed great concern over the loss of open space and impact on important natural resources. The lack of citywide priorities for open space protection left the Planning Commission and Zoning Board with little information and policy to guide their decision-making. This may have helped to prolong a long and expensive regulatory and legal struggle between the developer and the neighborhood.



Englesby Brook

- **Englesby Brook:** Englesby Brook is one of the very few surface waters that pass directly through the city on its way to the lake. The watershed encompasses several zoning districts of varying uses and intensities. The result is a fragmented stream corridor where portions of the brook are culverted as it passes under several commercial properties, and development continues to encroach upon the stream bank. The brook is a primary source of non-point pollution entering the lake, and is largely responsible for the closure of Blanchard Beach to swimming.

- **North Shore/Mouth of the River:** The northern lakeshore and mouth of the Winooski River is a sensitive and dynamic natural environment. Large areas of wetland, floodplain and river delta create an environment that is valuable for many species of wildlife and aquatic plants. It is also subject to constant change as the natural ebb and flow of the lake and the river constantly rearrange the shoreline. However, portions of this area are zoned for commercial uses and higher densities – a hold over from long outmoded aspirations.

Mouth of the River

Challenges to Open Space Protection

Despite these efforts, Burlington has no comprehensive and coordinated process for open space protection. The primary challenges facing the City fall into three key areas: defining public priorities, assignment of stewardship responsibility, and a lack of resources for acquisition and management.

City policy has consistently identified the importance of open space and natural area protection as part of city land use and development planning efforts. Until now however, Burlington has not defined and articulated its priorities regarding what resources should be protected and where. This has increasingly left the City in the undesirable position of reacting to plans to develop property with high natural and open space value with little direction offered to guide decision-making. Conversely, property owners do not know the City's conservation priorities, and therefore have

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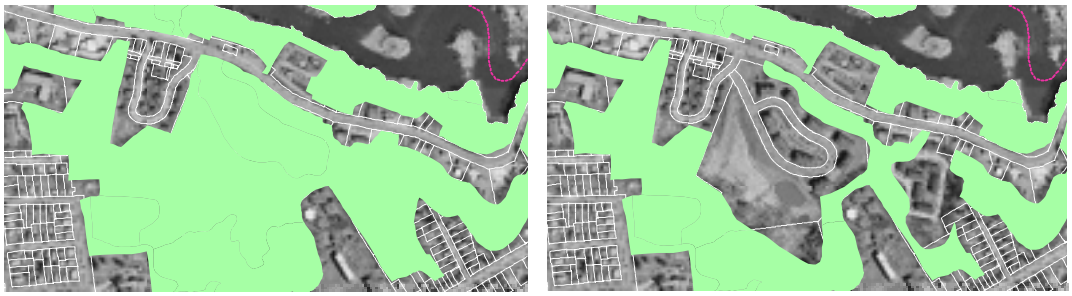
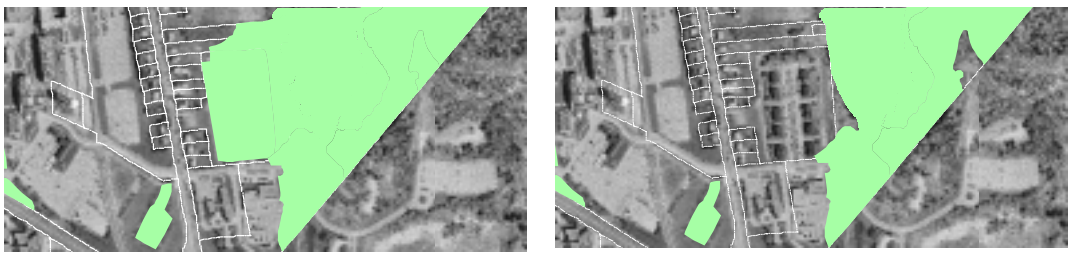
The following six maps depict areas of distinct change in open space between 1988 and 1999. The shaded areas represent mapped open space existing in 1988 on the left and in 1999 on the right.

1988 **Riverside Avenue** 1999



East Avenue



Appletree Point

no ability to consider city objectives before submitting development plans. This is further complicated an increase in neighborhood opposition to new development that is seen as threatening open space and quality of life.

Second, no municipal entity currently has the combination of authority, resources, skills, and equipment necessary to effectively acquire, oversee, and manage conservation land. The Dept. of Parks & Recreation has approximately 190 acres of conservation lands ("District Parks") as part of its land holdings. However, the Department is primarily in the business of owning and operating active public recreational facilities, and does not have the financial resources or staff necessary to accommodate additional lands. The Burlington Conservation Board has the authority to acquire, oversee, and manage undeveloped public land for conservation purposes. However, they too do not have the financial resources, the staffing, or the equipment necessary to carry out this function.

Finally, Burlington has not dedicated local funding to leverage state and federal resources for future land protection and stewardship efforts. This makes it very difficult to act in a timely manner when opportunities arise. The City must rely on third parties to act on its behalf. Additionally, many state and federal funding sources for land conservation require matching funds from local sources. While these obstacles have been overcome in the past, it makes the conservation projects more complex, more risky, and more costly in the end.

The City has identified these issues as major gaps in the current process and framework of city land conservation efforts. This plan addresses these issues, and attempts to fill these gaps in order to ensure that open spaces and natural areas important to the City of Burlington are protected as a legacy to future generations.

Future Pressure on Open Space

Future growth and development in Burlington is not only inevitable, but highly desirable. As a regional growth center and largest city in the state, development should and will continue to reshape and revitalize the city. From a regional perspective, concentrating future development into existing population and economic centers is a strategy that helps preserve working farms and forestland, makes for a more efficient use of public infrastructure, and protects the environment and landscape from the effects of suburbanization.

Between the summer of 1999 and the spring of 2000, Burlington's citizens engaged in a community visioning process called "*The Burlington Legacy Project*." Led by a diverse group of people from all segments of the community, the project spent nearly a year tapping the wisdom of hundreds of Burlington residents who shared insights drawn from a rich vein of everyday experience. The end-result was a vision of the future of the city which very much ratified the regional vision of an urban growth center.

The *Legacy Project* provides a roadmap for change that will guide Burlington's future as the vital economic, social, and cultural hub of the region. It envisions growth into a "real city" with both a significantly higher population (as high as 65-80,000 people within 30 years) and an outstanding quality of life, including a thriving business sector; full, high-wage employment; a vibrant downtown and waterfront; excellent housing opportunities; strong social supports; and an environment that is managed and protected with great care.

The *Legacy Project* recognizes that if the city is to grow significantly, then protection of important open space and natural areas must be among the highest priorities in order to preserve the city's quality of life.